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NEW SPECIES OF BOLIVIAN *OSBORNELLUS* AND *CHLOROTETTIX* (HOMOPTERA: CICADELLIDAE: DELTOCEPHALINAE)

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Abstract.—Four new species, *Osbornellus* ***amplus***, *O.* ***rostratus***, *Chlorotettix* ***nauticus***, and *C.* ***mansuetus,*** all from Bolivia, are described.

The Bolivian species of *Osbornellus* were treated by DeLong (1976) and by DeLong and Martinson (1976). The Neotropical species of both *Osbornellus* and *Chlorotettix* were treated by Linnavuori (1959). The genus *Chlorotettix* was described by Van Duzee (1892). A synopsis of the genus *Chlorotettix* was published by DeLong (1919). A review of the known species of *Chlorotettix* was published by DeLong (1945). New species of Mexican and South American *Chlorotettix* were described by DeLong and Martinson (1974). A synopsis of the genus *Osbornellus* was recently completed by Dr. Candace Martinson (unpublished). Two species of *Osbornellus* and two species of *Chlorotettix* are described at this time. The two species of *Osbornellus* described in this paper are not treated in the Martinson manuscript. All types are in the DeLong collection, Ohio State University.

Osbornellus amplus DeLong, NEW SPECIES

Figs. 1, 2

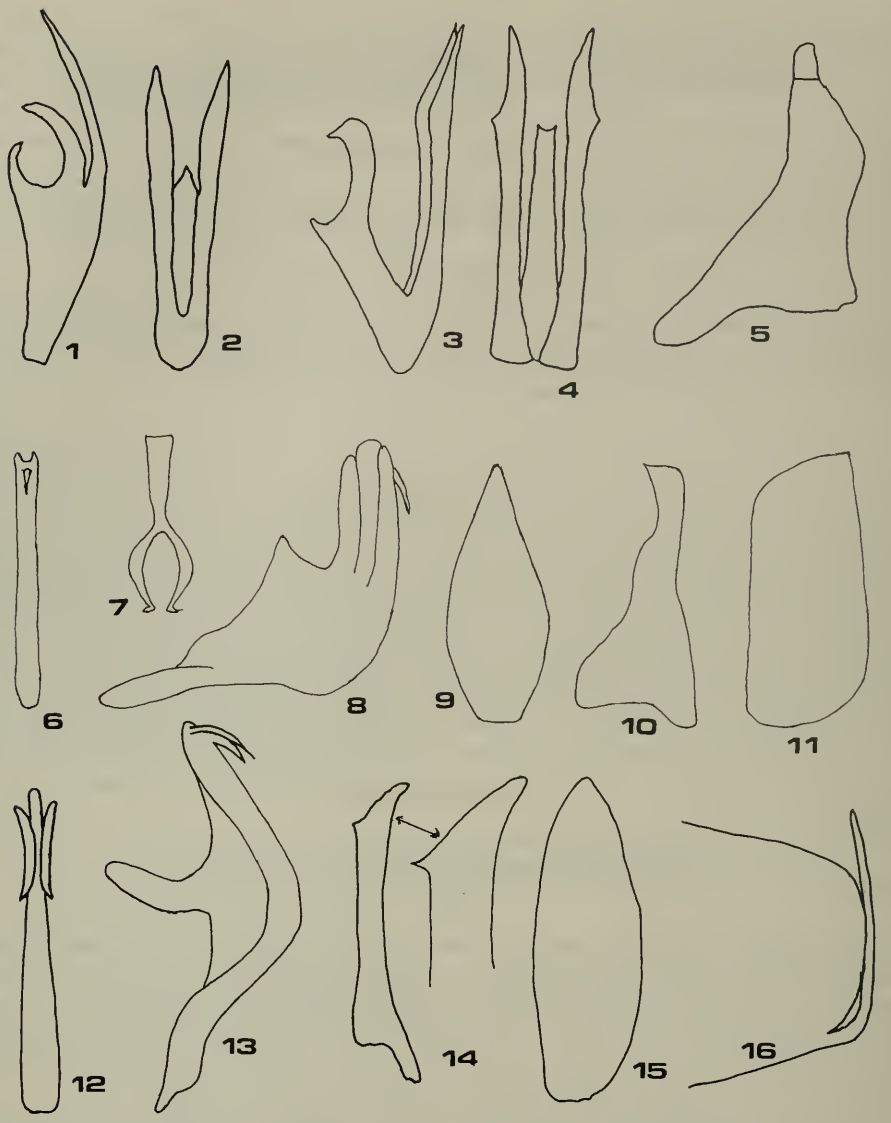
Description.—Length of male 5.0 mm, female 5.5 mm. Crown produced and bluntly angled. Color, crown rather uniform pale brownish with a slight pale yellowish longitudinal line at apex. Pronotum same brownish color as crown. Scutellum tinged with brown. Forewing pale brownish subhyaline, with 3 dark brown spots at ends of claval veins on commissure, 2 spots on cross veins of corium, and 2 spots on apical portion of costa. Veins brownish.

Female 7th sternum with posterior margin slopingly produced to form a triangularly produced lobe on median ⅓.

Male genital plates with elongate slender apices. Style with slender, curved apophysis, apex rounded. Aedeagus broadened at middle (in lateral view), dorsal portion with a deep concavity surrounded by a dorsal, slender, curved process extending caudally, and a longer, broader curved process extending dorsocaudally. Ventral portion with 2 long slender processes extending caudally, slightly broadened near apex, then tapered to pointed apices. Pygofer rounded at apex.

Types.—Holotype ♂, Bolivia, Buena Vista, 14-V-80, D. M. DeLong coll. One paratype ♀, same data as holotype.

Remarks.—*Osbornellus amplus* is related to *O. spinellus* DeLong and Martinson (1976: 429) and can be separated from it by the longer basal half of the aedeagus and the absence of a pygofer spine.



Figs. 1–16. 1, 2, *Osbornellus amplus*. 3–5, *O. rostratus*. 6–11, *Chlorotettix nauticus*. 12–16, *C. mansuetus*. 1, 3, 8, 13, Aedeagus laterally. 2, 4, 6, 12, Aedeagus ventrally. 5, 14, Style laterally. 7, Connective ventrally, 9, 15, Plate ventrally. 10, Style ventrally. 11, 16, Pygofer laterally (16, apical portion).

Osbornellus rostratus DeLong, New Species
Figs. 3–5

Description.—Length of male 4.6 mm, female unknown. Crown produced, bluntly pointed, typical of species of *Osbornellus*. Color, crown pale yellowish, unmarked. Pronotum yellowish with pale brownish coloration. Scutellum pale yellowish with pale brown basal angles. Forewings pale brownish subhyaline with

dark brown spots on clavus at commissure, on corium, and on apical and costal veins. Apex smoky, veins brown.

Male genital plate with a long slender apical ½. Style elongate with a short, blunt apophysis. Aedeagus with basal portion of shaft rather broad dorsoventrally, apical portion narrowed by broad concave excavation on dorsal margin forming a rounded apex, with a subapical spine on dorso-subapical margin. Two long lateral portions extend caudally from base, each side, beyond the aedeagal shaft. Processes broadened at ¾ their length then tapered to pointed apices.

Types.—Holotype ♂, Bolivia, Santa Cruz, 21-VII-1980 Don L. Foster coll. One paratype ♂, same except 1-VI-1980.

Remarks.—*Osbornellus rostratus* is related to *O. circulus* DeLong and Martinson (1976: 431) and can be separated from it by the more elongate dorsal portion of the aedeagus with very short processes.

Chlorotettix nauticus DeLong, New Species

Figs. 6–11

Description.—Length of male 4.5 mm, female unknown. Crown bluntly angled, more than twice as wide at base between eyes as long at middle. Color, bright, apple green, superficially resembling *C. viridius* Van Duzee but smaller, with central portion of crown and scutellum slightly yellow.

Male genital plates 2½× as long as wide at middle, apices bluntly pointed. Style with apex of apophysis truncate caudally. Aedeagus as broad as long, apical portion $^1/_5$ as broad as long. In ventral view, narrow, elongate, with apex slightly notched and bearing a short, toothlike spine on ventral margin, near apex. Pygofer with apex broad and blunt.

Holotype.—♂, Buena Vista, Bolivia 21-XI-1980, Donald R. Foster coll.

Remarks.—*Chlorotettix nauticus* is related to *C. curvidens* Osborn (in DeLong, 1919: 16) and can be separated from it by the absence of teeth on the apical portion of the pygofer and by the straight apical portion of the aedeagus.

Chlorotettix mansuetus DeLong, New Species

Figs. 12–16

Description.—Length of male 6 mm, female unknown. Crown produced, apex rounded, appearing bluntly pointed, slightly more than twice as wide between eyes at base as long at middle. Color, bright green, unmarked, forewings greenish subhyaline.

Male genital plates almost 3× as long as wide at middle, apices bluntly angled. Style straight, rather broad dorsoventrally, apex bluntly pointed on dorsal margin by the sloping of the apical margin, and bearing a prominent spine on ventral margin, at the point of origin of the sloping portion. Aedeagus with the heavily sclerotized portion forming a curved shaft bearing 2 subapical processes, about ⅓ length of shaft. A portion, scarcely sclerotized, appearing almost membranous, extends across the area formed by the curvature of the shaft proper, or the heavily sclerotized portion. A median finger-like portion extends dorsocaudally. Pygofer broadly rounded apically with a caudal spine arising at the ventrocaudal margin and extending dorsally along and beyond caudal margin.

Holotype.—♂, Bolivia, Puerto Villarall, 12-IV-1981, D. B. Foster coll.

Remarks. — *Chlorotettix mansuetus* can be separated from all other known species of the genus by the slightly sclerotized, but prominent, dorsal portion of the aedeagus.

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